# TECHNICAL REVIEW DOCUMENT For RENEWAL OF OPERATING PERMIT 010P0T231

Black Hills/Colorado Electric Utility Company, LP Rocky Ford Station Source ID 0890004

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# I. Purpose

This document establishes the basis for decisions made regarding the applicable requirements, emission factors, monitoring plan and compliance status of emission units covered by the renewed Operating Permit for the Rocky Ford Station. The previous Operating Permit for this facility was issued on March 1, 2007 and expired on March 1, 2012. However, since a timely and complete renewal application was submitted, under Colorado Regulation No. 3, Part C, Section IV.C all of the terms and conditions of the existing permit shall not expire until the renewal operating permit is issued and any previously extended permit shield continues in full force and operation.

This document is designed for reference during the review of the proposed permit by the EPA, the public, and other interested parties. The conclusions made in this report are based on information provided in the renewal application submitted on January 27, 2011, previous inspection reports, and various email correspondence with the applicant. Please note that copies of the Technical Review Document for the original permit and any Technical Review Documents associated with subsequent modifications of the original Operating Permit may be found in the Division files as well as on the Division website at <a href="http://www.cdphe.state.co.us/ap/Titlev.html">http://www.cdphe.state.co.us/ap/Titlev.html</a>. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised construction permit.

## II. Description of Source

This source is classified as an electric generating facility classified under Standard Industrial Classification 4911. This facility consists of 5 internal combustion engines, each capable of providing 2 MW of power. No. 2 fuel oil, or biodiesel (B20) is used in the engines as fuel. The engines are used to provide power during periods of peak electrical demand. There are two (2) 50,000 gallon diesel fuel storage tanks used to

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store No. 2 diesel fuel. Emissions from these tanks are below APEN de minimis levels and are included in Appendix A as insignificant activities.

This facility is located at 14<sup>th</sup> and Walnut Street in Rocky Ford. This facility is located in an area that has been designated as attainment for all criteria pollutants. There are no affected states within 50 miles of this facility and there are no Federal Class I designated areas within 100 km.

Based on the information provided by the applicant, this source is categorized as a major stationary source (Potential to Emit of any criteria pollutant > 250 tons/yr) for  $SO_2$ ,  $NO_X$  and CO. Future modifications at this facility resulting in a significant net emissions increase (see Reg 3, Part D, Sections II.A.26 and 42) for any pollutant as listed in Regulation No. 3, Part D, Section II.A.42 or a modification which is major by itself will result in the application of the PSD review requirements.

Emissions (in tons/yr) at the facility are as follows:

Emission Unit	Potential to Emit (tons/yr)						
	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>X</sub>	CO	VOC	HAPs
E001	18.89	18.89	76.63	546.36	87.69	7.55	0.143
E002	18.89	18.89	76.63	546.36	87.69	7.55	0.143
E003	18.89	18.89	76.63	546.36	87.69	7.55	0.143
E004	18.89	18.89	76.63	546.36	87.69	7.55	0.143
E005	18.89	18.89	76.63	546.36	87.69	7.55	0.143
Total	94.43	94.43	383.13	2,731.81	438.44	37.77	0.71
<b>Actual (2010)</b>	1.94	1.94	0.05	56.1	8.67	0.75	

#### **Applicable Requirements**

#### NSPS Subpart IIII

40 CFR Part 6 Subpart IIII includes requirements for stationary compression ignition internal combustion engines. The five engines at this facility commenced construction prior to the July 11, 2005 applicability date of this subpart and are therefore not subject to its provisions.

### **NESHAP Subpart ZZZZ**

40 CFR Part 63 Subpart ZZZZ includes requirements for reciprocating internal combustion engines (RICE). Subpart ZZZZ was amended on March 3, 2010 to include requirements for existing compression ignition RICE at area sources of HAPs. The five compression ignition engines at this facility commenced construction prior to June 12, 2006 and are therefore defined as existing engines under Subpart ZZZZ and must comply with the requirements of the subpart by May 3, 2013. As existing compression ignition RICE greater than 500 HP located at an area source of HAPs, the engines must meet CO concentration limits or reduce CO emissions.

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Note that Colorado Regulation No. 3, Part A, Section II.C.1.c requires an APEN to be submitted when a control device is installed.

#### Greenhouse Gases

The potential emissions of greenhouse gases at this facility are less than 100,000 TPY CO<sub>2</sub>e. Future modifications at this facility that exceed 100,000 TPY CO<sub>2</sub>e may be subject to regulation.

#### III. Discussion of Modifications Made

### **Source Requested Modifications**

The renewal application received on January 27, 2011 requested only a change of address for the company's headquarters. The updated address was added to the operating permit.

# **Other Modifications**

In addition to the source requested modifications, the Division has included changes to make the permit more consistent with recently issued permits as well as correct errors or omissions identified during inspections and/or discrepancies identified during review of this renewal. These changes are as follows:

# Section I – General Activities and Summary

 Revised the language in Condition 1.4 to include current conditions that are state-only enforceable.

### Section II – Specific Permit Terms

- Language was added to the opacity limitation condition pertaining to the length of exceedances for Method 9 readings.
- The applicable requirements of NESHAP Subpart ZZZZ and Subpart A were added to the permit.

## Section III - Permit Shield

Updated the Reg 3 Citation for the permit shield.

### <u>Section IV – General Permit Conditions</u>

• Updated the general permit conditions to the current version (5/22/2012).

#### Appendices

- Revised Division contact in Appendix D.
- Cleared the list of modifications from Appendix F related to the previous issuance.

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